

# THIRD NATIONAL SYMPOSIUM ON SURFACE TRANSPORTATION WEATHER

July 25-27 Vienna, Virginia

Sheraton Premiere at Tysons Corner

## Sponsors:

NOAA's Office of the Federal Coordinator for Meteorology  
FHWA's Road Weather Management Program

## Supporting Professional Partners:

TRB's Surface  
Transportation  
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AMS's Intelligent  
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tion Committee

ITS America's  
Weather Information  
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Interest Group

**Symposium Theme:**  
Improving  
Commerce and  
Reducing Deaths  
and Injuries through  
Innovative,  
Weather-related  
R&D and  
Applications  
for the Surface  
Transportation  
System

You are invited to attend a jam-packed, three-day symposium on the current weather and climate services requirements and plans for improvements of these services for the surface transportation community. Learn more about the social and economic benefits that can be obtained from increased use of improved surface transportation weather and climate information. Hear about the federal-level research and development (R&D) priorities for improvements in surface transportation weather and climate information, provide feedback on them and help shape how we will move forward to meet our research and development needs. For further details, please periodically visit our web site at [www.ofcm.gov/wist/wist.htm](http://www.ofcm.gov/wist/wist.htm).

## Symposium Objectives

Adverse weather conditions have a major impact on the safety, mobility and efficiency of our Nation's surface transportation system. The six sectors of the surface transportation community are roadway, railway, transit, pipeline, marine transportation system, and airport ground operations. Weather affects operator behavior; motor vehicle, train, pipeline, or vessel performance; and system infrastructure.

Just over four years ago, the National Oceanic and Atmospheric Administration (NOAA) and the Federal Highway Administration (FHWA) released the first report on improving surface transportation safety and cost efficiency through improved weather and climate information products. The December 2002 WIST Report, Weather Information for Surface Transportation (WIST)—National Needs Assessment Report, provided a roadmap for the Nation's surface weather activities and helped to catalyze a rapid expansion of interagency, intergovernmental, and public-private partnering to mitigate the safety and economic risks of "surface transportation weather."

The goal of this symposium is to advance the state of the surface transportation weather enterprise, including the use of weather and climate information to support decision making, safety, and productivity within the six surface transportation modes and related industries. This symposium will present a perspective on the current state of the surface transportation weather enterprise. Experts will discuss transportation weather topics and products, and potential advances in weather sensing, weather systems, and forecasting models that lend themselves to integrated applications. Time will be provided for participants to discuss weather service issues and proposed methods to promote applications and partnerships. This symposium will build upon numerous, previous activities through the following objectives:



## OBJECTIVES

- **Overarching Objective:** Provide a forum for the surface transportation weather and transportation research and user communities to work together to enhance collaboration and partnerships, ultimately helping to improve surface transportation weather products/services for those who use, operate, and manage surface transportation infrastructure.
- Enhance understanding of social/economic benefits derived from increased use of improved surface transportation weather and climate info.
- Review, validate, and prioritize surface transportation weather research and development needs.
- Define and prioritize the products/services needed to support the surface transportation community.
- Provide recommendations for weather and surface transportation communities on the way ahead to meet needs using attendee input/feedback.
- Provide information on surface transportation weather and climate activities to enhance decision-making.

## SCOPE/IMPACTS

- **Roadway:** On average, there are over 6,442,000 vehicle crashes each year. More than 24 percent of these crashes are weather-related with nearly 7,400 people being killed and over 690,000 people being injured.
- **Railway:** Between 1995 and 2005, 865 weather-related crashes occurred on America's railways, causing 8 deaths, 1,242 injuries, and \$189 million in property damage costs. Most of these weather-related crashes were associated with extreme temperature variations.
- **Marine Transportation System:** Between 1996 and 2000, weather-related causes accounted for 11 percent of marine transportation mishaps and 3.6 percent of all recreational boating mishaps.
- **Transit:** National statistics on weather-related mishaps are currently not available. However, overall safety incidents decreased from 2002 to 2004, resulting in a decrease of 32 fatalities and 278 injuries.
- **Pipeline:** In 2005, the pipeline systems sector experienced 4 weather-related fatalities and 14 injuries. Three fatalities were attributed to incidents caused by temperature and one to high winds.
- **Airport Ground Operations:** National statistics on weather-related mishaps are not currently available. However, there are anecdotal examples of weather's impact. For example, all airport ground operations (e.g., baggage loading and unloading, refueling, ramp activities) cease when lightning is detected within a certain distance of an airport.



## Desired Participants

Federal, state, and local agencies and Federal laboratories

Transportation operators and planners (highways, railroads, transit, marine, airport ground operations, and pipelines)

Industry, governmental and professional associations (transportation, meteorological, other non-transportation)

Non-transportation users of surface transportation weather services (e.g., insurance, emergency response)

Universities and other academic institutions

Public and private weather service and information providers, consultants, and equipment suppliers

Social scientists, geographic information scientists, economists, risk communication specialists, human factors experts, urban planners, and sociologists

## Logistics

There will be a registration fee of \$125 for attending this symposium. We regret that we are unable to pay for any travel arrangements. Along with a host of presentations and discussions, there will be an exhibit area, and a welcome and exhibitor reception. A block of hotel rooms will be provided for your convenience.